

VIRGINIA WILDLIFE

JANUARY, 1956

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Game Commission Photo by Kesteloo

On the increase—Virginia's fastest growing wildlife resource.

VIRGINIA WILDLIFE

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*A Monthly Magazine Dedicated to the Conservation, Restoration, and Wise Use of Virginia's Wildlife
and Related Natural Resources, and to the Betterment of Hunting and Fishing in Virginia*

COMMONWEALTH OF VIRGINIA



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Cover

There are cold bleak days in January even in the Southland.

V.S.C.C. Photo

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Why We Need Wild Places

NOT so long ago I met an interesting old man on a lonely moose trail in the wilds of the north country.

I was miles from camp and the lateness of the afternoon and the cold scudding snow clouds had me sprinting campward at a fair clip. I didn't think there was a soul for miles around. Suddenly, directly in front of me, there loomed the gray figure of a man. We both froze in our tracks. Our sense returned, we greeted each other and began a friendly conversation.

"Me go trap in deep bush," he said in his broken French-Canadian. "Stay 'til Christmas. Den I come out, get more grub, and go back again. This country good for man."

I learned later that Pierre made regular visits to the wilderness bush country to cure himself of a bad drinking habit, and once the three bottles he always carried into the country were gone there was nothing to do but sober up and let the wilderness country do its salubrious work. Pierre was 67 and a more rugged trapper there never was. The bush was obviously good for him.

The case in point is that we can all stand the antidote of wild places once in a while, not so much to make us teetotalers but to help us regain a sense of equilibrium, serenity.

In America wild places are a spiritual necessity. We need them to recreate ourselves and to remind us what the primeval glory of our country was like. Every time I go into a wild or wilderness area I am struck by the healing influence of the surroundings. Mental cobwebs disappear; nerves loosen up; contentment returns. No doctor can prescribe a pill that will do that for a body.

Some decades ago certain selfless men like the late Bob Marshall realized the necessity of wild places in our lives and set about the task of getting the federal

government and the states to set aside pristine areas dedicated to the spiritual welfare of mankind. The Wilderness Society was born and began and carried on the fight to preserve wild places. The National Park Service, U. S. Forest Service, and several of the states have wisely set aside a few areas classed as "wilderness" and "wild areas," but these places are inadequate for our growing population. More areas—and there are not many wild areas left on the continent—need to be set aside.

Like all worthy conservation endeavors it means a battle. A battle not only to add to the areas we now have but to protect the ones that now exist. Pressures are constantly at work to grab away the last vestiges of our primeval wilderness. This is especially true near and around big centers of population and yet it is here where wild places are needed most, and surprisingly enough, where opposition is strongest.

In Virginia we don't have any areas that can be classed as truly "wilderness" areas but we do have some wild areas. We need more of them. We need to protect the ones we have.

Just last spring the Commission, through the noble efforts of I. T. Quinn, executive director, and Senators Robertson and Byrd, waged a valiant fight to help save Parramore Island on Virginia's eastern shore, an undisturbed wild area. The Navy had designs to make the wild and wildlife-rich island a bombing target for off-shore maneuvers. Fortunately the grab was stopped and the island was saved. Conservation emerged victorious.

In this new year of 1956 it might be well for us who believe in conservation to look around and see what should be done to safeguard—and add to—our wild places which constitute a precious natural heritage.

— J. J. S.

Ontario Report

Continuing our report of last month on the Call of the Northern Bush we are happy to report that the second contingent of our party got their moose in the Paudash Lake country—a four-year-old bull. The party was forced down on their flight out and had to spend

the night in the bush. Clear weather the next day, however, worked to the advantage of the pilot and three hunters and they were able to get themselves and their 600 pounds of moose meat out safely.



U. S. Forest Service Photos

TWIN PARTNERS IN POVERTY

By BERNARD FRANK

*Assistant Chief of the Division of Forest Influences
U. S. Forest Service*

DESPITE all our vaunted achievements in making nature over to suit our needs, we still lie at the mercy of two of her most elemental forces—fire and floods. Separately and together, these twin scourges repeatedly threaten our well-being, our security, our capacity to produce the needs and comforts we demand—life itself. Town or countryman may see his hard-won gains wiped out. Loved ones may be lost. The beauty and utility of the land and its flowing waters may be impaired, sometimes for generations.

Many people attribute these cataclysms to acts of God and there may well be enough truth in this belief to stimulate closer inquiry on why these phenomena become so formidable and destructive. Others may blame the government agencies whom the public holds responsible for protecting life and property and often accuses also of ineptitude when tragedy strikes. A few, perhaps too few, are aware that the extent to which we can mitigate or absorb the shocks of such disasters depends greatly upon our ability to develop new outlooks and better foresight. This is not an easy alternative to the reluctant half-hearted measures we are willing to apply today. But until we do face up to our task frankly and boldly, both fire and flood will continue to leach away our energies and impede our struggle for safer, healthier, and more productive living.

Fire and floods are an intimate part of human existence. Our concerns with them trace back to the dawn of man. Both have brought great benefits: fire, in the development of technology and the arts, folklore, philosophies, and religions; and floods, in building with their fertile silts the world's richest croplands. Yet

down through the ages, these same elements have also visited naked disaster upon us. We must still expend herculean efforts to understand, control, or put to useful service the tremendous energies these scourges unleash. Estimating the losses from past or probable fire and flood has long been a well-established part of the calculations of economists, engineers, conservationists, foresters, and others in government and private employ. The growth of insurance against fire and flood and the well-organized forces we assemble to bring relief to their victims dramatically illustrate how seriously we take these recurrent disasters which affect our well-being.

Year in and out fire and flood each destroys an estimated billion dollars worth of property on the farms, in the forests, and in the dwellings, towns, cities, and industries across the land. Of course such cold figures reveal little of the human suffering, loss of life, separation of families, disrupted livelihood, and fear and uncertainty these disastrous events produce.

Fire and flood have much in common. At their worst, they represent forces thus far largely beyond man's control. The holocausts of the distant—and recent—past, as in the dense forests of Idaho and Montana, Washington and Oregon, Minnesota and Wisconsin, the brushfields of Southern California and in parts of the South where thousands to hundreds of thousands of acres were seared of their cover—are striking examples. Whether started by lightning or other natural causes, or by logging, mining, brush clearing, railroads, incendiarism, etc., such large fires were largely the outcome of high, hot, turbulent winds and low humidities.



Burned-out timber, litter, and humus impoverish land, water, and people.

Similarly, our great floods stem from climatic conditions not of man's making. The fast melting of heavy snow packs, heavy and sustained rainfall, or combinations of both, caused the Columbia River floods of 1876, 1894, and 1948, the Potomac River flood of 1936, the Connecticut River floods of 1936 and 1955, the 1949 flood on the Savannah River, and many, many more on these and other streams.

Nevertheless, flood disasters cannot be charged entirely to nature's vagaries. On the contrary, their effects—and in the case of far too many large fires, their outbreaks as well—have often been aggravated by our own carelessness or lack of forethought.

Fire in the Flood Picture

Unwanted forest, brush, and range fires upset the watershed conditions that lead to small floods, compound the misery and damages of large floods, and increase the difficulties of providing satisfactory water supplies. The nation's fire record for 1954 (1955 is even worse) is eloquently indicative of our lagging accomplishments. During that year, 177,000 fires burned 8.8 millions acres in 47 states. Many of these fires occurred on land now receiving organized protection by the States or Federal Government. But, acre for acre, five times as many fires broke out on unprotected land and scorched 24 times more area per fire than on the protected land. Altogether, the 49 million acres without organized protection suffered 5.9 million acres of burn, as against 2.9 million acres burned on the 600 million protected acres.

The national situation is sobering enough. But when we look at the 11 states which comprise the southern group the national picture seems mild by comparison.

The great bulk of unprotected land (33 million acres out of the U. S. total of 49 million) is within these states. During 1954 these neglected acres had over three times as many fires as did the similarly unprotected forests in the rest of the United States. The percentage of area burned was well over twice that for the remainder.

Conditions on the protected areas are equally depressing. Here the *number of fires per million acres protected* exceeded that for the rest of the country by over 8 times! Moreover, 1.5 percent of the South's protected land burned over in 1954, as against only 0.13 percent in the other states.

Since the condition of about 80 percent of the 185 million acres of forest land needing protection in the 11 states is highly meaningful for soil and water conservation in the South, the effect of fire on the regional economy goes well beyond the loss or damage to pulpwood and sawlog trees and wildlife. These states contain large portions of the southern Piedmont, Appalachian Highlands, Ozark and Ouachita Mountains, and the equally erosive Upper Coastal Plain Hills. This extensive region produces large and valuable water supplies including the sources of most of the South's hydroelectric power. It also represents a source of floods—the frequent small, muddy flash flows, as well as the less frequent larger overflows—and some of the highest sediment and silt pollution rates in the entire United States.

Fire is by no means the only factor which has aggravated the South's woes over soil erosion, costly drinking and industrial water, and floods, but its attacks will have to be much more effectively corralled before we can expect a greater degree of freedom from their depredations.

Happily, Virginia is not among those southern states whose fire record leaves so much to be desired. By contrast, her losses are well below the national average. All of her forest land needing organized protection is receiving it. Its effectiveness is indicated by an area burn of only 0.12 percent in 1954 as against the national average for protected land of 0.49 percent. Only 164 fires occurred per million acres protected as against the corresponding national average of 212 fires.

Little floods and mudflows are often a direct result of fire, careless cropping, or other short-sighted practices.



Interestingly enough, some 10 years ago, the author participated in studies in the Southern Piedmont and southwestern coal counties of Virginia to evaluate the effects of fire upon erosion, floods, and water supplies. The purpose of these studies (which also included timber, wildlife and other values) was to help determine more closely how much additional fire protection might be warranted.

The author's investigations in the Piedmont, where a fair amount of information was available from watershed research by the U. S. Forest Service, erosion surveys by the Soil Conservation Service and from the State Division of Water Resources, showed that even though most fires were not spectacular, damages to watershed values accounted for slightly over half the average annual losses. (Damages to timber amounted to 42 percent, and wildlife, recreation, and other losses, about 8 percent of the total.)

A similar study in the southwestern coal counties, based on a much lesser amount of available information, revealed a quite different story. Here, the author found that, so far as the forest lands were concerned, fire appeared less a factor in accelerated erosion, more frequent flooding, and poorer quality water supplies than did uncontrolled woods grazing, over-cutting and destructive logging. The direct and indirect losses to watershed values that could be charged to fire alone amounted to only 15 percent of the total loss by fire to all the values considered.

These studies were only of a short-term nature and badly needed basic information—such as only long-time research can furnish—was lacking. For example, it was not possible to measure the effects of forest conditions upon groundwater recharge, water quality and hydroelectric power output. Nevertheless, the results were indicative enough to demonstrate the importance of adequate fire protection as one of the conservation practices essential for stable soil and water relations as well as for timber, wildlife, and recreation.

Much progress has since been made in ferreting out the reasons for the debilitating effects of fire upon the health of watersheds and the economic activities dependent upon them. Recent studies by the Forest Service in the Piedmont of South Carolina, in Southern California and other western mountain regions all point to the

Only poverty gains when the land is ruined.



Healthy soil: the clue to clean waters and prosperous living.

accentuated hazards arising from repeated burning or from individual large, hot fires. The investigations show that formerly stable watersheds become unstable and that sometimes the return to normal soil and water flow conditions may require as long as 70 years.

Floods — Big and Small

Our susceptibility to floods is largely of our own making: a failure or unwillingness to keep out of the path of potential high waters; and our laggard pace in maintaining or achieving favorable conditions of runoff from the land.

Building our homes, factories, and arteries of transportation and communication in the flood plains is like lying down in the middle of a highway. Sooner or later something will run over us. And so it is with rivers. When enough rain falls, the stream banks will be overtopped. The flood plain is itself a product of the stream and part and parcel of its regime. We can build storage reservoirs, dikes, levees; carefully control the surface flows from farms and forests; perhaps even divert the runoff from the roofs and streets of our ever-spreading towns and cities into underground reservoirs before it reaches the minor channels. But from time to time we must expect the river to assert its right-of-eminence domain. And whenever that happens, people are bound to be hurt.

How simple it would seem to plan our living and working arrangements to avoid such inevitabilities! Yet, like other apparently clearcut opportunities for safer, happier, and more productive living, this one requires more adjustments in our habits, ways of thinking, and immediate economic interests than we yet care to accept. In the meantime we choose the easier



Fires are costly to control and count heavily in watershed damage.

alternative of meeting our current problems halfway, leaving to coming generations the headaches of devising more adequate solutions.

Many of us live in localities not subject to major overflows. On the uplands, and in the smaller valleys, ample opportunities are available to provide greater relief from unwanted flood flows. Here the effects of land use on the frequency, flashiness, and muddiness of the lesser streams are closer and more direct. And here, by applying tested conservation practices, we can do much to establish more wholesome relationships with our watercourses.

These practices include less destructive methods of clearing land for farms, homes, communities, or factories, and of growing and harvesting our farm and forest crops; more adequate fire protection; greater provision for healthy fish and wildlife environment and for the outdoor recreational needs of our fast growing populations. They include other well-planned, systematically applied measures on and along the streams themselves to help them adjust to changing conditions and to improve their attractiveness and utility.

Big watersheds, like the Potomac River Basin, are composed of many little ones. Where enough of the smaller watersheds are protected, the impact of major floods on the larger streams should be diminished. We might expect their stages and their velocities to be

lower and their waters to carry less sediment than otherwise. So far, however, no watershed of a major river has yet been remodeled to an extent where the effects of widespread conservation practices upon floods can be tested by sound technical methods.

Correcting Our Environmental Ills

The destructiveness of fire and flood largely reflects man's maladjustment with his environment. Because we have not yet attained adjustments, the prospects for mitigating these scourges and their effects lie in the future. Notwithstanding years of experience in preventing and fighting forest fires, major outbreaks still occur, even on well protected lands. Despite the huge annually recurring losses, research to discover the fundamental causes, both natural and human, and to devise more effective means of control has hardly begun. Likewise, we have not yet willingly stood up to the challenge that bigger and more violent floods continually throw up to us.

Both challenges can be met, provided we try to see the overall picture and to exercise our fortitude and intelligence accordingly. Fire and flood need not always remain twin partners in poverty, once we make up our minds to understand and adjust our outlooks and activities and thus attain a greater harmony with our environment.

Me and Hunting

By PETER J. HANLON

Staff Assistant George Washington National Forest

I GET a tremendous bang out of hunting . . . other people's hunting.

For instance, I guess it was in 1946, that a colored boy shot a fine buck on Cheat Mountain, ten points as I remember. I was Ranger on the Greenbrier District of the Monogahela at the time. He brought the deer to my house about 9 o'clock that night.

It seems that he had hunted all day, without success. Shortly before dusk he worked his way to U. S. Route 250, where a car was to meet him. Impatient with waiting and imbued with the hope that springs eternal in a hunter, he wandered into the edge of "Blister Swamp." Lo, he spied a deer lying on the ground. It moved not after the first shot, nor the second. He cautiously approached his trophy. Shades of Jupiter! The deer was not only dead, it was hog dressed!

Could he keep the deer? Game protector Bill Rexrode decreed yes, subject to its being claimed by the "first killer." The deer was never claimed.

It was the first year of the "cased gun law" in West Virginia. This is a good law, especially since it is coupled with a "spot-light law." Parker Arbogast, of Durbin, is a powerful good hunter in my book, particularly when it comes to turkey hunting. This day he was after a deer.

In compliance with the law, he wrapped his gun (in newspapers) and securely tied the same. Parker spied the buck practically before he (Parker) got off the bus on Kerr Top, Shavers Mountain. The deer disdainfully stood in a clearing for more than a sporting length of time. Parker just couldn't get the gun unwrapped.

Along the same lines, I think about the "deer drive" the day we hunted near Seneca State Forest. Luke Mullenax was too good a woodsman to believe that the buck had passed through unseen. Tracks show plainly in fresh snow. In addition, he quickly disproved any alibi concerning the safety on the gun. It worked easily. Such a cussing over a normal case of buck fever!

Yessir, the deer get big and old in the Cheat Mountain Country. I remember the year Pearl Cromer got on the track of what he knew was a big buck. Hardy mountaineer that he is, he tracked it some five miles . . . to find it dead! The antlers were brought back as evidence.

How wrong can you be? I think of the fellow who stopped at the Ranger Station one day and wanted to know where he could kill a bear. I patiently explained that bear hunting was an organized proposition. It called for experienced hunters and well trained dogs. It was just plain foolish to hope to get a bear otherwise.

He allowed that he and his wife would head into the Laurel Fork country, pitch a tent, and camp for a few days.

He roused me early the following morning. Camp had hardly been set up the previous afternoon when he located a bear track, followed it, got a

shot at a bear. He then followed the trail of blood until rain and darkness forced him to drop the pursuit.

I rounded up some bear hunters and dogs for him, but the all-night rain had ruined the trail. Otherwise, I am sure he would have bagged a bear. He most certainly almost did.

There was that fellow at Big Levels three years ago from New York City. His wife and 8-year old son were with him. All were equipped with new and complete hunting outfits. I remember we talked with them and, of course, he wanted to know where to shoot a deer. We told him it would be largely a matter of chance; he might see one right after rounding the curve in the road, about 500 feet ahead. Honestly, those folks no more than rounded that turn when a full scale war seemed to break loose.

Well, the report we got was something. It seems that the family saw the deer and the mother was about to shoot, but Pop came to the front and swept all aside.

(Continued on page 22)



TRAPPING

AN

OFF-SEASON

SPORT

By JAMES W. ENGLE, JR.
District Game Biologist



A trapper will learn to observe animal signs. The better he is at this, the better trapper he will be.

THOSE winter months of January and February, when you have put away your favorite gun and it is too early to take out the fishing tackle, can furnish the outdoorsman with many hours of sport if he turns to trapping. Even week-end trapping will bring fur and fun. Some sportsmen have worked out a routine of shad fishing, sucker fishing, trout fishing or the like in the early spring, followed by bass fishing or varmint hunting through the summer, continued by dog training and hunting in the fall. But that leaves the cold winter months with little to do except clean up equipment for another season or take care of puppies for the next fall.

A few people think of trapping as being done only in the north country, but they would be surprised to find how many little furry animals are running around close to and even within some city limits right here. The amount of money paid out each year to trappers in Virginia for furbearers is surprising; it is estimated to be about \$500,000. The muskrat ranks as number one for value in the Commonwealth, followed very closely by the mink. The value in dollars to a week-end trapper is not nearly so important as the sport and recreation in trying to out-figure a mink or bob cat. Trappers trapping for sport will very often have the pelts tanned and make them into wearing apparel for the ladies of the family. Needless to say, a lady receiving a mink scarf in return for her husband getting up at daybreak and arousing the whole family, is much more inclined to be tolerant than when all she sees is a rack of deer antlers brought home to collect dust on the wall.

Trapping can be a very interesting week-end hobby. The trapper can set traps on Friday or Saturday evening and pick them up on Sunday. Of course the more nights the traps can be left out the better are his chances. Two

dozen traps will keep a week-end trapper busy. If you are trapping on private land, be sure to get permission from the landowner. This is required both by courtesy and law.

If you do not know where to begin, you can start by checking stream banks under bridges on various state primary highways. This is public land and an ideal place to pick up muskrat and mink. A week-end trapper can cover 40 or 50 miles and find places for all his traps. This is also a conservative type of trapping, inasmuch as you just hit the high spots at natural funnels for game along water courses.

A trapper will learn to observe animal sign. The better he is at this, the better trapper he will be. He will also have to learn the life history and habits of the animals he is after. Powers of observation of this nature are of great value to those persons interested in hunting. Also if he is interested in fishing, studying animals such as mink, otter and raccoon will teach him a great deal about streams, how the water levels fluctuate, and he will find that good trapping streams have an abundance of food available. It is really a twelve-month job to watch for animal sign out in the field. Trapping will develop this technique to a point where it will become second nature to a person. A real outdoorsman is always looking for animal activity, bird life, fish life, habitat conditions and how it affects those things in which he is interested.

Just what is there to trap in Virginia? There are a lot of furbearers around and the monetary value of them varies a great deal. In addition to mink and muskrat, there are opossums, skunk, raccoon, red and grey fox, otter, bobcat and beaver. Better check your game law on fox trapping in your county. The raccoon is protected in most of the western counties from trapping. Since 1953, beaver trapping is done under permit to the land-



The muskrat ranks number one in fur value in the Commonwealth, followed closely by the mink.



The amount of money paid to trappers each year in Virginia is surprising; it is estimated to be about \$500,000.

owner. At one time, we probably had marten and fisher, but they are now extinct. Such animals as muskrat, opossum, skunk and bobcat are fairly easy to trap, but for mink, otter and fox, a trapper has to know just what to do to get one to step into a toe pincher.

Mink, muskrat, otter and raccoon are caught in and along streams and ponds. Mink, raccoon and otter will travel along streams, so you should look under bridges and highways. You will also find places where the muskrats will pull out on the bank or a little pile of roots indicating a feeding station. Here is where to catch your muskrats. If mink and raccoon are traveling the stream you will find a little trail that they will follow every time they go under a bridge. Try to set your trap in the water so that the animal will step into the trap. Often you will find that mink and raccoon do not travel the same trail under the bridge. One will take one side of the stream and the other, the opposite side. Here you have to take your choice of which animal you prefer. Mink and raccoon are hunting their food and will investigate any freshly dug holes along the stream bank. Dig a hole with a trowel back into the bank about six inches deep, place some animal scent back in the hole and set your trap in the water at the entrance. You will pick up every raccoon and mink that travels the creek and notices the digging. Strong fish odors will draw raccoons more than they will mink. Be sure to anchor your traps so that the animal can go to deep water and quickly drown. This is more humane and will keep the animals from wringing their feet or chewing them off.

The otter is found mostly in Tidewater Virginia and the eastern part of the Piedmont. He is a close cousin to the mink and skunk but much harder to catch. The otter is a great traveler, covering many miles in a night's travel. His food consists mainly of fish. Since an otter likes to catch his fish alive, baiting is somewhat of a problem. The best opportunity to trap an otter is at some regular place where he enters the water, or narrow down a small spring or drain so that he has to step where you want him. It takes a large trap to hold an otter and if you cannot drown him, it is doubtful if you will be able to hold him. The fur of an otter is one of the most durable and best wearing furs of the animal kingdom.

The opossum and skunk are probably our most easily trapped animals. Both will go to bait very easily. You can build V-shaped cubby pens out of logs, sticks, rocks or the like, placing the bait so that the animal will have to walk into the trap to get to the bait. Old groundhog holes are another good place to catch these animals, either baited or unbaited.

Fox trapping can become a real test of your skill at out-figuring an animal. After a fox has learned what a trap is, he may begin turning your traps over. Then if you can figure how to get him to step into a trap, you have learned something. There are all kinds of ways to trap fox, but the dirt hole type of set is perhaps the best to use. Red fox are more difficult to trap than grey fox.

For those who live in the western part of the state, perhaps bobcat trapping is the easiest and most exciting. The bobcat has about as much regard for traps as a housecat. He is not trap-shy at all. Try trail sets along mountain ridges or use a piece of deer hide hanging on a bush to attract his attention; this will bring him to your traps. Try weighing some of these bobcats when you catch them. You will be surprised to find they do not weigh as much as you thought. Open some of their stomachs to find out what they had been eating, for you will learn a lot from such attentions to animal life.

Beaver have been trapped for only a few years now. In all cases, a permit is issued to the landowner on whose property the beaver are living. The landowner may use the permit himself or have someone else trap the beaver for him. Often, the landowner does not have the time or is not interested in the trapping and would be glad to have someone do the trapping for him. From a beaver hide you can make such things as a fur muff, ascot, collars and cuffs for a coat, a trophy that your wife will be proud to wear.

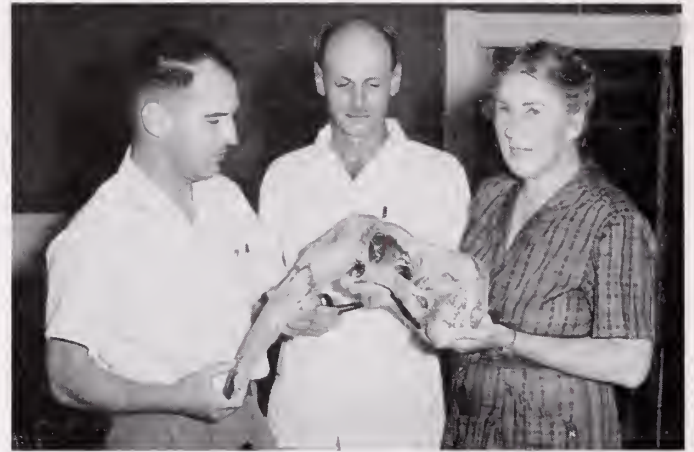
Those persons who have never tried trapping should get a good book on trapping and study the different types of sets for the animals wanted. Another good source of information on trapping and places to trap is your Game Warden. Look him up and talk to him. You will find him most helpful in trying to increase your year-around enjoyment of the outdoors.

Walrus Tusk on Parramore Island

By C. C. STEIRLY

FURTHER proof of the presence of the walrus on Virginia shores was obtained by the Virginia Society of Ornithology on its annual summer shorebird study trip to the Eastern Shore on August 27, 1955. In 1827 the front portion of a walrus skull was found on the beach in Accomac County according to the book "Wild Mammals of Virginia" published by the Commission of Game and Inland Fisheries in 1947.

The present find consisted of a left half of a skull with one complete tusk. This was discovered by Mrs. William Wachenfeld of Orange, New Jersey, a member of the Virginia Society of Ornithology, who had come to Wachapreague to join the Society's annual shorebird trip to Parramore Island. While crossing an open stretch of sand beach on the north end of the island in order to get a better view of a flock of black-bellied plover, she observed what at first appeared to be an odd-looking bit of driftwood. Closer inspection revealed that it was some sort of bone partially buried in the sand. Several other members of the field party were called over and the skull was unearthed and carefully examined. That it was the skull of a walrus was quite obvious to the ornithologists for no other mammal has the tooth arrangement and tusk that is found in the walrus. The bone was quite dark and the ivory tusk was blackened with age which indicated that this was a fossil and that the specimen had been dead for thousands of years.



The author (center) explains the walrus tusk find to discoverer Mrs. Wachenfeld and friend.

The 1827 find was recalled by Dr. R. J. Watson of Arlington and it was conjectured by the group that this was another walrus that had died on the Virginia Coast during the Great Ice Age or pleistocene period of geologic history when all of the northern portion of North America was under the great ice cap. This, of course, would have pushed the residents of the Arctic region considerably south of their present ranges.

The specimen was carried back to the boat and later it was deposited in the United States National Museum where Charles O. Handley, Jr., co-author of the book referred to above, pronounced it a fossil walrus *Odobenus rosmarus* which is the same species as that found today in the far north above Labrador.

High water caused by Hurricane Connie had washed away the sands that had covered this walrus for centuries. Fortunately it was found by a party of naturalists who were interested in the scientific aspects of the find. It was, therefore, turned over to the museum for identification rather than being retained as a mere curiosity. Similar finds should also be turned over to competent authorities for identification and recording, because, by doing so, interesting light can be thrown not only on the kinds but the relative abundance of animals, that visited Virginia during the ice age.

Can You Guess Who Said This?

"The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased; and not impaired in value."

"You will find something far greater in the woods than you will find in books. Stones and trees will teach you that which you will never learn from the masters."

"The pleasantest angling is to see the fish cut with her golden oars the silver stream, and greedily devour the treacherous bait."

VIRGINIA WILDLIFE

CONSERVATIONGRAM

Commission Activities and Late Wildlife News . . . At A Glance

STATE FOREST HUNTING SUCCESS. Fifteen hundred and nine hunters secured permits to hunt in the State Forests which were open for five days at the beginning of the general hunting season. They bagged 69 deer and 72 turkeys, at least 199 quail, 219 squirrels, 124 rabbits, 15 raccoons, 6 ducks, 3 grouse and 2 foxes.

EASTERN DEER WINS BIG GAME TROPHY CONTEST. For the first time in five years, a deer trophy taken east of the Blue Ridge Mountains took top honors in the State Big Game Trophy Contest held in Newport News on November 5. Lester W. Huffman, of Roanoke, was the winner with his deer killed in Southampton County which scored 195 7/16 points. He had won the eastern regional contest prior to the state title. Second prize in the State Contest went to William J. Coffman, of Front Royal, who had been first prize winner in the West of the Blue Ridge Contest held in Harrisonburg on October 29. Jay Hill, of Richmond, was the bow and arrow trophy winner for his eight-point whitetail killed on Hog Island. Gerald May, of Criders, was awarded the state championship for his 400-pound black bear killed in Rockingham County.

TENTATIVE DEER KILL FIGURES FOR WEST OF BLUE RIDGE. With additional reports still to come, the deer kill figures for the area west of the Blue Ridge Mountains have already reached the 6,424 mark. Executive Director I. T. Quinn of the Commission expects that final figures will probably match or surpass last year's kill of 7,373.

SHOMON TO BE WILDLIFE WEEK CHAIRMAN. At the invitation of Ernest Swift, executive director of the National Wildlife Federation, J. J. Shomon, chief of the Education Division of the Commission will again serve as chairman of Wildlife Week in Virginia this year. The theme for Wildlife Week in 1956 will be "Save Endangered Wildlife." Last year's emphasis was on the value of marshlands in conservation.

BEAR WITH A HOMING INSTINCT. On November 22, Mark Campbell, of Roseland, Va., bagged a male bear near Waynesboro. Its tag number was 134 and a subsequent checkup showed that the bear had been trapped and tagged at Sherando Lake last June 4 and released the same day at Vance's Cove, about 85 miles away, in Frederick County. Apparently the homing instinct was strong in this bear at least.

NINTH ANNUAL WILDLIFE ESSAY CONTEST ENTRIES MOUNTING. Nearly 300 schools have entered the ninth annual Wildlife Essay Contest sponsored jointly by the Commission and the Virginia Division of the Izaak Walton League and approved by the State Board of Education and endorsed by the Virginia Resource Use Education Council and the Resource Use Committee of the Virginia Academy of Science. Many more schools are expected to enroll their eligible students in grades 5 through 12 before the deadline of February 28, 1956. There will be a \$400 college scholarship for the senior in high school who writes the best essay and there will be \$1000 in cash prizes, seven in each grade: eight grand prizes of \$50 each; eight second place awards of \$25 each; eight third prizes of \$15 each; sixteen honorable mention awards of \$10 and sixteen special mention prizes of \$5 each.



William C. Kean (dark hat) and S. C. Harris Jr., both of Louisa Co., quail hunting in Cumberland State Forest.



A. V. Adamson with rabbit, of Garden City, N. Y., hunting rabbits with his brother T. D. Adamsan, of Richmond, on their farm in Powhatan Co.



J. R. Lucado, of Richmond, hunting squirrels in Cumberland State Forest.



James River Rad and Gun Club. Man at rack hanging deer—J. S. Veer of Hampton (his deer—119 lbs.

Glimpses of the 1955

On November 21, from the mountains took to the fields and woods in pursuit near perfect for the entire week of the tains. Early reports from the mountain vest on all species of game birds and a high

Game Commi



Mitchell Bird checks turkey with Dr. Henry Mosby at a checking station on the state forest.



of Newport News. First man carrying deer on pole—M. L. Van Der (points). Second man, W. A. Dumkum.

1956 Hunting Season

to the sea, Virginians old and young alike
of their favorite game. The weather was
er season west of the Blue Ridge Moun-
to the tidewater point to a successful har-
mals. Here in pictures are some of the
ghts.

Staff Photos



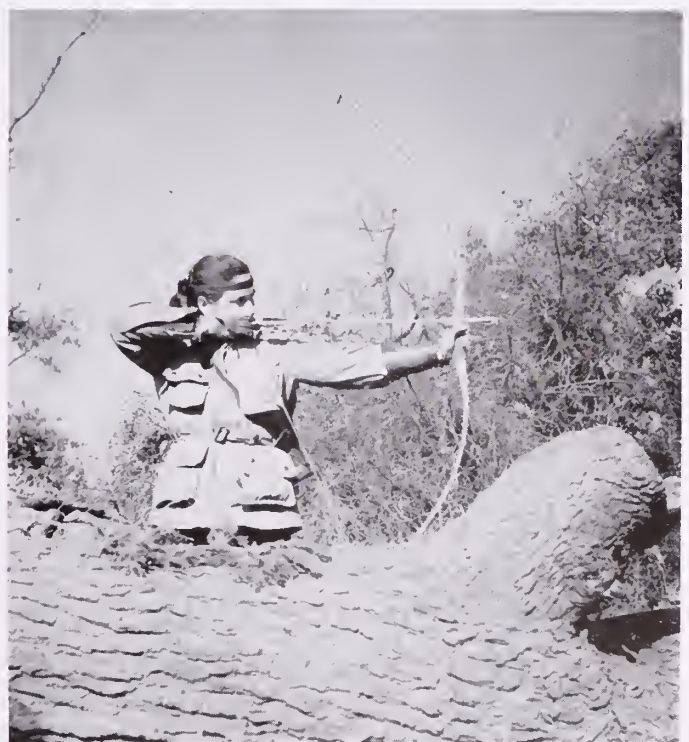
From left to right, Bud Atkins and Curley Atkins killed two fine bucks in Highland County. June Atkins and Carl Williams help take them to a checking station.



Carl Williams, of Giles County, with a ruffed grouse killed in the rugged Allegheny Mountains of southwest Virginia.



C. W. Wood Jr., sets out goose decoys on the Eastern Shore in Northampton County.



Pat Hamilton, of Richmond, bow hunting for deer.



Wildlife workers check a forested area after a heavy snow for signs of bird and animal life on the area.

Working together for

MORE FOREST GAME

**Some aspects of the cooperative
game management program on
Virginia's national forests***

By
ELMER C. RICHARDS

VIRGINIANS are proud of the cooperative wildlife management program which has been in effect for over 15 years on the 1½ million acres of mountain land that comprises the two national forests within the state.

The Virginia Plan, as the program is known, was started in 1937 when the Commission of Game and Inland Fisheries and the U. S. Forest Service agreed to work together to cooperate in managing wildlife species on the George Washington and Jefferson National Forests.

Located in the western part of Virginia, these two great national forests have become increasingly important as major public hunting areas for the east. Located in 30 of Virginia's 100 counties, these national forests extend for over 200 miles along western Virginia.

The cooperative wildlife plan was born from the concept that wildlife is a product of the land and that the control of the habitat and harvest of the game are two major tools in managing wildlife. Due to the fact that the U. S. Forest Service controls the land and the state of Virginia owns the game, it became apparent to wildlife workers that these two agencies had to join hands in order to manage the game on the vast acreage of federal land. Thus, the cooperative wildlife program was born in Virginia.

With every plan of action there has to be a method of finance, so in 1938 the Virginia General Assembly passed a law requiring a special \$1.00 national forest stamp of every person who hunts, traps or fishes on National Forest land. The law also stated that this money had to be spent for wildlife restoration and management work on national forest land and for this purpose only. In 1939 a total of 11,000 national forest stamps were sold. This figure grew over the years and in 1954 a total of 65,000 national forest stamps were bought by Virginia sportsmen.

In addition to this fund, the cooperative wildlife budget is financed by contributions from the Pittman-Robertson Fund, with which everyone, I believe, is

familiar. The Commission also contributes matching money to obtain this P-R money.

In recent years the total wildlife budget, including all fish and game work done on the national forests — totals about \$250,000. Since approximately 750,000 acres of the national forests are within game management units this indicates that roughly 33 cents per acre is being spent in Virginia to manage fish and game on national forest lands.

After the cooperative wildlife agreement came into being one of the most pressing needs facing wildlife workers was the re-establishment of the white-tail deer in the western part of the state. In this area, deer had been eliminated or reduced to such a low number that stocking was a necessity.

In 1939 a system of game management units were established on the national forests. These units ranged in size from 10,000 to 80,000 acres with a full-time manager assigned to each unit.

Within these areas, some 1,790 deer were released during the period 1932 through 1943. These releases were highly successful and most counties had their first deer season in 1945. Now the annual deer kill from western Virginia totals 7,500 animals.

At the present, the personnel of the cooperative wildlife program consists of 23 game managers. These men are the backbone of the program itself. These men are employed by the Commission and are assigned to game management units on each of the forest ranger districts. Each game manager is paid by the Commission. In the early years of the program the game manager came under the direct supervision of the U. S. forest ranger on whose district he works. Now the game biologist is his immediate supervisor.

The game manager is responsible for carrying out assigned game habitat development work; he also enforces the fish and game laws, carries out fish management work and cooperates with the U. S. Forest Service in boundary marking and fighting fires. The ranger works with the state game biologist on all wildlife management work and approves all plans for wildlife

*A paper presented to the Southeastern Association of Game and Fish Commissioners Conference, October 3-5, 1955.



Deer, bear, raccoon, and turkey are heavy users of the established water holes developed on the national forests. This program is to be continued.



At present Virginia's two national forests contain over 5,000 acres of wildlife clearings and this figure increases at the rate of 300 acres per year.

development work on his district. He coordinates, through inspections, wildlife management work with the other uses identified with the national forest; such as timber management, watershed protection and recreational use. It is this basic concept of multiple-use that has been the key to such successful cooperation in this program.

On each forest ranger district, the ranger assistant is a very important person in the cooperative program. He is a representative of the forest ranger on the ground. He works with the game manager and expedites the game management work on the ranger district by marking and disposing of timber or pulpwood or any other products that may be on a designated wildlife site selected for habitat development. He also hauls supplies to the game manager, directs boundary marking, assists in keeping records, and supervises the operation of Forest Service equipment, such as bulldozers, graders, trucks, etc., which are often used in game management work.

The State Game Commission has four game biologists assigned to work on national forest wildlife work. The game biologist is responsible to the State Game Commission for all the game management work in his district. Detailed plans for habitat development work are drawn up by watersheds or in many cases on a game management unit basis. All plans, showing location, acreage, types and numbers of planned improvements, and required technical standards, are submitted to the forest ranger for prior approval before any of the ground work begins. Adequate wildlife inspections are made by the game biologist and ranger to assure that development plans are followed. Monthly work plans are prepared for the game managers.

In the time that is left, I would like to tell you about some of the actual types of habitat development work we do in Virginia. The two national forests are largely covered with dense stands of second growth timber—so, our biggest job has become that of land clearing and the creation of forest edge.

Wildlife clearings of one acre to five acres have been established throughout the forest—usually spaced $\frac{1}{4}$ mile apart. At present, the two forests contain over

5,000 acres of wildlife clearings and this figure increases at the rate of 300 acres per year. The overall goal is to place 1% of the forest in wildlife clearings or to clear 15,000 acres. On each wildlife clearing various wildlife foods are seeded. Every area is fertilized and limed according to soil sample analysis.

The first type of habitat work in any area is the reclamation of the many abandoned fields and orchards. This has been done widespread on the forests.

Within recent years, heavy equipment has replaced hand labor in land clearing operations. Heavy bulldozers of the D-7 class are employed for land clearing at an average cost of \$75 per acre. This is in contrast to the old "girdle and cut" method of hand labor which averaged \$125 per acre for land clearing.

Recently the development and improvement of woods roads and trails have been stepped up on the national forests. We come into an area and widen trails to at least the height of the adjacent trees. These roads have a double purpose in helping to disperse hunters and also are excellent habitat developments.

Another feature to mention about our work on the national forests is the use of "screenings" in our seeding program. "Screenings" consist of a mixture of grass seed heads, weed seeds and chaff obtained from the cleaning of grass seed or small grain. We obtain orchard grass "screenings" from several local seed houses and periodically send trucks to obtain "screenings" which we estimate costs us a cent per pound. Wildlife crews sow this seed on timber sale areas, rough forest clearings, eroded areas, woods roads, log landings or any opening in the forest where we wish to establish a little vegetative cover or control erosion. Some people question the use of such seed because of the introduction of obnoxious weed seeds, etc. We, however, have found that no such growth results and that the germination appears as high as regular grass seed. Wildlife use appears high, since the resulting cover contains many valuable wildlife foods.

In Virginia the Commission and the U. S. Forest Service have a program to establish blight resistant chestnuts. We have over 100 blight resistant chestnut plantations established on selected spots throughout the national forests. Some plantations are 15 years old and



Personnel of the Commission of Game and Inland Fisheries and the United States Forest Service work as a team to manage wildlife.



Hunter management is a vital part of big game management. Hunter access roads help equalize the hunting pressure.

bear seed annually. Groups of 50 to 100 blight resistant chestnut trees have been planted with the idea that in years to come we would have a local seed source of chestnuts which would be distributed and planted on a wider scale. This program is endorsed by all.

Our program on the national forests started out and still is one of habitat development, however, the program is moving very rapidly into a maintenance type of program. We are getting to a point where we have a total of around 5,000 acres in clearings on the national forests and over 500 miles of wildlife trails and roads. Each game manager is faced with the problem of having so many clearings to maintain that his development work has been reduced to a minimum. We maintain our forest clearings and trails with a tractor drawn rotary mowers and we estimate that a man with such a mower can maintain 4 to 5 acres per day. We carry on a program of using basal sprays on trails and clearings during the winter months.

Another interesting feature of our program on the national forests is the development of hunter access roads. Hunter management has become a vital part of big game management on the national forests. We have large blocks of forest land inaccessible to hunter use and get hunter use only around the edge. Through the development of access roads into this country we get the hunter back into these areas where they can harvest the animals that we want removed. Access roads also facilitate development work, establishment of clearings, and other features in managing this back country.

A wide scale salting program is carried on as part of our deer management program. We have found that through establishment of salt licks, water holes and wildlife clearings, we can hold our deer herds back away from populated areas where they could cause crop damage.

Another recent feature of our development program on Virginia's national forests is that of establishing water holes. We construct a series of bulldozed basins or water holes for wildlife purposes throughout the forest. They usually are less than $\frac{1}{4}$ acre in size, and are often on mountain tops and ridges. The Soil Conservation Service is contacted from time to time to approve water hole

sites and construction of these ponds. In other areas, we take advantage of natural springs and use dynamite to create small water holes. In still other areas we construct small log dams to back up basins of water for wildlife purposes. We feel that water is a very important tool in the management of big game and turkeys in Virginia, especially in mountain areas where many streams are intermittent and little water exists throughout the summer months. Deer, bear, raccoon and turkey use is heavy around established water holes. This phase of our program will be increased in the future, possibly to include some developments for waterfowl.

Wildlife living on the George Washington and Jefferson National Forests in Virginia constitutes a valuable and popular forest crop. Like any crop it has presented problems in its management. Since 1938, the Commission of Game and Inland Fisheries and United States Forest Service have cooperated as a team to manage this valuable resource. Only teamwork and close cooperation between these two agencies have made this wildlife management program a success.

TABLE OF WILDLIFE STATISTICS ABOUT COOPERATIVE WILDLIFE PROGRAM ON VIRGINIA'S NATIONAL FORESTS

George Washington National Forest —	
Net Acreage	906,375
Jefferson National Forest — Net Acreage	544,640
(Total Acres — National Forest)	1,451,015
Number of Counties Containing Forest Land	30
Acreage of Federal Refuge (Big Levels)	30,000
Acreage of State Game Refuge	7,000
Estimated Game Populations—White-tail deer	60,000-80,000
On National Forest — Black Bear	1,500
Land — Turkeys	3,000
Number Deer Stocked on National Forest Land	
Period 1932 through 1943	1,790
1954 Deer Kill (National Forest Counties)	7,460
1954 Bear Kill (National Forest Counties)	253
1954 Turkey Kill (National Forest Counties)	500
Number National Forest Stamps Sold 1939	11,000
Number National Forest Stamps Sold 1954	65,000
Number of Cooperative Game	
Management Units	23
Size of Management Units — 10,000 to	
80,000 acres	
Number of Game Managers	23
Acreage In Game Management Units on	
Virginia's National Forests	750,000
Number of Wildlife Clearings to Date	5,000
Number of Wildlife Roads and Trails (Miles)	500

The Aftermath of Hunting

By MRS. EVELYN P. RUEGER
Assistant Executive Director

THE true sportsman is not primarily interested in his bag of game at the end of a day's hunt. The meat angle is only secondary. More important is the pastime of his sport, the delight in being afield with companions, seeing good dogs work, and perhaps getting a good sporting shot at some fleeting game.

But there is the aftermath. There are the folks back home, the wife and kiddies, who eagerly await his return and question: "What did you get?" If he has been lucky and there's meat for the table, everyone will share in the successful hunt. And this is as it should be, for game should never be taken unless it is used as food. Good conservation dictates that game should not be wasted. Frequently, though, game is wasted by not giving it proper care in the field or preparing it right for the table.

Hunters should remember that if the wife is given the responsibility of preparing the game, every effort should be made to keep it in as good condition as possible. Birds, rabbits and squirrels should be gutted in the field soon after being killed and the cavity tract wiped dry with grass or leaves. If the day is warm, the game should be kept in a cool place and in the shade. The body heat of game should be let out as quickly as possible by airing, as this will help make the meat more palatable, more flavorful, when finally cooked. Don't eat game too fresh and don't over-age.

The Commission is preparing to revise its publication on *Game Recipes*, bring it more up-to-date and add a few additional recipes. Here are a few simple ones which will be added and which I can personally vouch for because I have followed them for years.



The body heat of game should be let out as quickly as possible by airing, as this will help make the meat more palatable and flavorful.

Rabbit Baked in Milk

1 rabbit	1 teaspoon salt
3 tablespoons butter	4 cups white sauce
1/3 cup flour	1 teaspoon sage
3 strips bacon	

Dress and clean one rabbit and disjoint into pieces for serving. Mix flour, salt and sage in bowl. Thoroughly coat pieces of rabbit with this mixture. Saute in the butter until brown on both sides. Place rabbit in a casserole and lay the strips of bacon over the surface; pour the thin white sauce over and around the rabbit. Bake in oven of 375° F. for 2½ hours, or until meat is tender.

Smothered Doves

Doves are best picked, not skinned, split down back (kitchen scissors are excellent for this), remove entrails, wash in salt water and wipe body cavity clean with paper towel. Lightly flour, salt and pepper, then place in frying pan in hot melted butter, brown on both sides quickly. With breasts placed down, pour about 1½ or 2 inches of hot water in pan, put lid on pan and let simmer very slowly for 2 hours. Serve on toast.

Broiled Squirrel

Squirrel is one of the best and tenderest of all wild meats, having a mild, rarely a gamy flavor. Seldom is it necessary to soak or parboil squirrel. Squirrels should be cleaned as soon as possible, best to clean in the woods, wiping the body cavity clean with grass, cloth or paper and allow body heat to dissipate. Skinning the squirrel can wait until later, however.

After they are cleaned and skinned, rub with salt and pepper; brush with melted butter and place on hot



These rabbits have been properly prepared. Hunters should remember that if the lady of the house is given the responsibility of preparing game, it should be properly cared for in the field.

broiling rack. Broil for 50 minutes, turning frequently and basting with drippings every 10 or 15 minutes. Serve with lemon wedges.

Venison A La Mode

After venison has been prepared for cooking, cut in small pieces; place in crock or glass jar; cover with vinegar and water in equal parts. To this add 1/2 teaspoon salt, 6 pepper corns (whole black pepper) and several bay leaves. Soak for 24 hours, then remove meat,

keeping the liquor in which it has soaked. Rinse meat in cold water, and allow to drain on paper towel for 5 or 10 minutes, then dredge with flour. Melt butter in skillet and saute meat until brown. Pour in liquor (vinegar and water in which soaked) to depth of 1 1/2 inches. Cover skillet closely and allow to simmer, (*not boil*) until done. Remove from skillet and thicken gravy with flour or cream. If desired a teaspoon of sherry may be added to the gravy.

IS YOUR PET GUN HOUSEBROKE?

By BILL CLEDE

Training Section National Rifle Association

IN the fall of the year a young man's fancy turns to thoughts of hunting in the great outdoors. Out come the rifles and shotguns to be cleaned, inspected, and fondled in anticipation of the coming season. A few weeks of the year the gun is foremost in your mind. But what about the rest of the year when it is left at home?

A great deal has been done in the field of hunter safety. Eleven states have adopted legislation concerned with the education of new hunters and this is effectively reducing the firearms accident rate. As a part of the NRA Hunter Safety Course the proper care and storage of firearms in the home is discussed.

The 1954 edition of "Accident Facts," published by the National Safety Council, says that 1,000 persons died in homes of firearms accidents during 1953. This is actually a small percentage with a population death rate of only 0.6. However, any accident involving a firearm naturally draws publicity. It is by nature tragic because it is so easily prevented. Ninety of these deaths occurred to persons four years old or under. Ignorance is no excuse.

Just as we have rules for safe hunting, so are there rules for guns at home.

TREAT EVERY GUN AS IF IT WERE LOADED. Since "unloaded" guns have caused injury, consider them all loaded and treat them with the respect due a loaded firearm.

When taking a gun home you want to protect it as well as carry it safely, so **CARRY IT IN A CASE.** A good gun is something we save for nowadays so it is well worth the few extra dollars to buy a good gun case. It will keep inquiring hands away and prevent the fine stock from being scratched. Naturally, carry it unloaded and uncocked. Take the bolt out and carry it separately.

We take pride in the ownership of a fine hunting rifle or shotgun. It should be displayed to best advantage. An attractive gun rack will lend to the rifle's appearance and, when equipped with a lock, it will keep it safe.



Before storing your gun, clean it thoroughly. Use a good solvent in the bore until the patch comes out clean, then dry thoroughly and put in a light film of oil. Excessive oil or grease in the chamber or bore can create pressures greater than the safe maximum. Clean all metal parts and wipe on a light film of oil. Stock waxes and preservatives are commercially available to keep the wood in good condition.

When cleaning your gun, be by yourself. The only time you need ammunition is in the hunting field or on the range so leave it locked away separately from the firearms. Check for mechanical defects and always make sure the bore is clear before using the gun. Now that the gun is clean, lock it in the rack.

Friends will probably want to see your guns when they come to call. Naturally you want to show your pride and joy. **OPEN THE ACTION.** The first thing to do is open the action and make sure there are no cartridges in the chamber or magazine. An open action is the most dependable safety because the firing pin cannot reach the cartridge. Safeties are mechanical and thus subject to malfunction. Use them supplementary to good gun handling.

Even with an open action—or if it must be closed to get the right "feel" — **POINT THE MUZZLE IN A SAFE DIRECTION.**

(Continued on page 22)



James A. Hand displays his bandaged left leg that was bitten by the 250 lb. black bear hanging to his right.

A Rare Bear in King William County

WHEN James A. Hand heard his young beagles baying frantically in a thicket near his house at the edge of Cohoke Swamp, he grabbed his .22 rifle and went to investigate. When he got close to the spot, a 250-pound black bear crashed out of the bushes and charged. Hand shot the animal once in the neck, but it kept on coming and bit him in the left leg. He shot the bear again in the head and struck at it with the butt of his rifle until it split.

Fortunately, Hand's guest from Richmond, Cleveland Blankenship, was following him with a shotgun. When Hand finally managed to get clear enough of the bear, Blankenship finally brought it down with a shotgun blast in the head.

No one was sure where the bear came from, though the county does have extensive swamps where a bear could have been raised. A check with King William County officials and the game warden, George Meredith, and old timers failed to turn up reports of any bears killed in the area for many many years—though hunters have reported seeing bears occasionally. John Gwathmey, rod and gun editor of the Richmond "Times-Dispatch" recalls that his grandfather's place was called "Bear Island" because of a tradition that a bear had

been killed there sometime before the War Between the States, suggesting that bears were unusual there even a century ago.

Certainly this bear drew crowds and attention when it was hung, dressed, but with the hide still on, at Hand's farm. Game Warden Meredith telephoned excitedly to J. J. Shomon, chief of the Education Division of the Game Commission and Editor of *Virginia Wildlife*, to report that a 250-pound sow bear had been checked in by Mr. Martin at Martin's Service Station on Route 30. At first, the warden had thought Martin was kidding, because a bear kill seemed so remote in that county, but one look was enough to convince him that Hand and Blankenship had bagged a bear indeed. Shomon went down to verify the whole unusual story with a camera and on-the-spot interviews.

Theories of how the bear happened to be in King William County were many. One pointed to the possibility that the bear might have got off her course in the mountains and followed the tributaries of the North Anna and Mattaponi rivers on down until she and Hand had their fateful encounter which ended the bear's nomadic adventures in tidewater Virginia.

"Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question whether a still higher 'standard of living' is worth its cost in things natural, wild, and free. For us of the minority, the opportunity to see geese is more important than television, and the chance to find a pasque-flower is a right as inalienable as free speech." — Aldo Leopold

GUN HOUSEBROKE *(Continued from page 20)*

You can recognize the person ignorant of the safety rules by the carelessness and disregard with which he handles a gun. Always insist that everyone near you obey these common sense rules of safe gun handling.

ME AND HUNTING *(Continued from page 9)*

"He was the man of the family, he would bring home the bacon; he, the mighty hunter." Of course, he missed the deer, and again, and again. They were a happy, witty, humorous group and had a wonderful time, deer or no deer.

So help me, these are all true episodes.

Howard Mack, of Durbin, was about 17 years old when he killed his deer. I don't believe he was an experienced hunter, although his Dad was an excellent grouse hunter.

Any how, the deer Howard killed was a trophy buck. He killed it with one shot and that shot severed the jugular vein. The deer fell with his head downhill for a perfect bleeding operation.

Finally, this one happened this year. I was travelling with Jack Hicks, ranger on the Warm Springs District of the George Washington National Forest. We decided to head over to the Locust Springs area in Laurel Fork and see how the several hunters who were camping there were getting along. We went by way of Allegheny Motorway, north along Allegheny Mountain on the divide between Virginia and West Virginia. Hunters were scattered along the mountain top; a remarkably large number, considering that there was a steady drizzle of rain and it was so foggy that we drove with headlights burning. Well, as I remember, it happened near Chestnut Levels. The deer's head appeared like a phantom out of the mist. What a brush pile he had on top of his head! A trophy deer if I ever saw one. He wasn't over twenty feet in front of the car when we stopped. His first notion was to charge us. He lowered his head and took a few steps in our direction, then he stared.

In the meantime, Jack had a gun which he had trouble picking up. The door was hard to open. About the time he stepped off the road and loaded his gun, Mr. buck moved into the protection of the surrounding mists. Some thrill, eh?

One of the greatest thrills I ever got from hunting, my kind of hunting, was in 1952, the second year Big Levels Federal Game Refuge was open. It was on Saturday, the last day for deer. I arrived in Waynesboro about 5:00 a. m. and struck a nearly solid line of hunter traffic which I sincerely believe extended for three miles. An estimated 2,500 hunters were in Big Levels that day. I was struck full in the face with the conviction that hunting is of tremendous importance to an amazingly large number of people. As a national forest worker, my faith in the value of public lands was renewed. Use such as this is only a harbinger of the ultimate importance and value of an out-of-doors open to public use and enjoyment.

LaCrosse Ruritans Sponsor Wildlife Food Contest

The results on the home farm is one of the best ways to tell whether we are doing a good job selling to the young people the value and wise use of our wildlife.

For a good many years the Commission of Game and Inland Fisheries has been putting forth a great effort to make our young people wildlife conscious. It is their hope that by making these young people understand that wildlife must have food, cover, and protection to maintain and even increase their numbers for the benefit and pleasure for all.

One of the most worthwhile efforts of the Commission was to distribute through the schools wildlife seeds to be used in seeding wildlife borders or plots. Talks were made by the game wardens and classes were taught by the teachers on the proper methods of seeding, fertilizing, and soil preparation, after the student was aided in locating the site.

With all the good work and interest in planting these plots we came up short of our desired results, after we would find the bags of seed in the school closet where the student put them to take home later and then promptly forgot about them. Others took theirs home and put them away until seeding time. Again they were forgotten. Then the boys quite often failed to do a good job selling his parents and they would not give him a plot to seed. Still others would not furnish the boy with fertilizer to fertilize his plot; so with the busy time in the spring on the farm many of the seeds did not get seeded or were improperly seeded. Those who made a sincere effort were discouraged because of three years of drought.

Realizing that we needed to do a better job the agriculture committee of the LaCrosse Ruritan Club recommended that the club sponsor a wildlife feed plot contest, offering prizes for the five best plots.

In October these plots were judged by Mr. W. S. Crute, Gerald Simmons, and J. Byron Rockwell. Each student was scored on wildlife food available, site condition and location.

So good were the plots this year that the judges had to make a second trip to determine the winners.

At the regular Ruritan meeting in November the winners were selected; Parker Johnson, first; Bryant Etter, second; Jimmie White, third; Marion Harper, fourth; and Edward Mills, fifth. A good meal and a check for all the boys were enjoyed.

This article is being written in hope that the civic organizations in Virginia will take interest in the young people in their community and offer them a little inducement to do a good job in wildlife conservation and wise use, for wildlife is one of our greatest assets, and we can not afford to neglect it.

By — J. Byron Rockwell, Agricultural Chairman



Hunting Out of Season Pays— The County!

J. E. Thornton, supervising game biologist for the Commission, sends us a report on a whopping fine exacted in West Virginia recently.

For possessing 22 illegal squirrels and one ruffed grouse shot out of season, Magistrate Don Cole fined Ralph Pugh, of Backus Mountain in Fayette County, West Virginia, \$1,206, including costs and sentenced him to 690 days in jail.

That was not the only stiff sentence meted out by Cole. Also brought before him was another Backus Mountain hunter, Orville Sawyer, who drew a 27-day jail sentence and a fine and costs totalling \$182.50 on charges of possessing nine squirrels.

There has been much debate about whether these constituted excessive fines and punishments, but certainly they will make the mountain hunters give out-of-season hunting a second thought.

This Punishment Fits The Crime

A fairly enjoyable punishment and an effective one at that has been worked out by one Louisiana town. All boys caught carrying or firing guns in the town limits are sentenced to a rifle range where they are instructed in the use of firearms and encouraged to use them properly. A leaf from that Louisiana law book could profitably be adopted by other communities.

VAFTA Field Trials At Hawfield

The 36th annual field trials of the Virginia Amateur Field Trial Association were held at Hawfield Farm in Orange, Virginia, on November 14-17. Guy H. Lewis is president of the association. Judges were Clarence H. Edwards, of Chatham, and L. L. Stevens, of Falmouth. W. P. Blackwell, of Orange, was field marshal.

Cross Smoke, owned by George Tuttle, of Newport News, was the first place all-age winner. This made Tuttle's third win and he retired the cup. Wilkins Bobwhite Boy, owned by Guy Lewis, took second place and C. A. Prestwood's Wayriel Jack was third. There were 48 dogs in this class.

Derby winner was W. C. Chaney's Jake Shannon, from Sumter, South Carolina. A Warsaw, Virginia, dog, Bob Sanders' Windy Way took second place and Stormy Mike's Choice, owned by A. P. Beirne and R. C. Brooks, of Orange, was third.



Cross Smoke (left), first place all-age winner of the VAFTA field trials, with owner George Tuttle. Wilkins Bobwhite Boy (right), owned by Guy Lewis, placed second.

Pittsylvania Waltonians Organize

A large group of Pittsylvania sportsmen met at the Gretna High School on the evening of November 16 to organize a chapter of the Izaak Walton League of America.

It was largely through the efforts of Game Warden S. V. Pickrel that interested sportsmen like George Hedrick, Burke Toney and other Pittsylvania sportsmen, together with a whole contingent of hard workers from Lynchburg chapter of the I.W.L.A., met to form a new I.W.L.A. chapter.

J. J. Shomon, chief of the Education Division of the Commission of Game and Inland Fisheries, was the principal speaker of the evening. Shomon spoke on the reasons for organizing a conservation club and, once organized, suggestions as to what members might do to implement a long-range conservation program.

Forty-seven sportsmen signed up at this organizational meeting which had been preceded about a month ago by a preliminary meeting to which members of the Lynchburg chapter had come to help interest the group in forming its own chapter. Fifteen of the Lynchburg chapter members also attended the meeting on November 16, including State Division President C. I. Van Cleve and officers of the Lynchburg chapter.

There were about 75 at the meeting at which the new chapter was organized and officers elected. George Hedrick is president of the club. Burke Toney is first vice president and Sam Berger, second vice president. William Midkiff is secretary and Harvey Motley, treasurer of the chapter, which has applied for a charter.

One of the initial projects will be acquisition of property and a lake to be known as Cherry Lake, between Gretna and Chatham.

A Tagged Raccoon Reported

Dr. Henry Mosby writes that William Cumbie caught a tagged raccoon in Giles County that was tagged and released in connection with a raccoon study in 1952. This coon was released 5 miles southeast of Galax in Grayson County and was captured about 50 airline miles away from this release point. If you find a bird or animal that is tagged, send the tag to the Commission of Game and Inland Fisheries, 7 North 2nd Street, Richmond, Virginia. A lot can be learned from these reports.



Lynchburg IWLA Succeeds in Sewage Plant Project

Six to one, the voters of Lynchburg supported the Izaak Walton League chapter's proposal that the cost of a plant to purify the City's sewage which empties into the James River be paid for by an increase in water rates. The project was presented to the voters in the form of a referendum on November 8, 1955 and was overwhelmingly favored by the citizens of Lynchburg.

In a memorandum sent out by the Lynchburg chapter—largest chapter of the Izaak Walton League of America—before election day, it was pointed out that the 1400 members had been studying the pollution abatement problem for many years. "We honestly believe," continued the statement, "the proposed method of financing this large municipal project is the most feasible yet devised and in the best interest of all the people of Lynchburg. We encourage all Voters to vote. Solely on the merits of the proposal, we solicit your vote *FOR* the referendum."

In its study, the IWLA chapter had found that abatement of pollution of the James above Lynchburg had been largely accomplished and that the river "now flows to Lynchburg practically unpolluted and furnishes the emergency water supply for the City." As the source of water for many cities and towns downstream, the chapter believed that it was the "civic duty" of Lynchburg "to remove our municipal pollution from James River."

In addition to this responsibility, there would be obvious advantages to Lynchburg. "Clean water in James River offers Lynchburg extensive recreational opportunities, enjoyable beauty and a natural resource of unlimited potential uses for the industrial development of the City through-

out the years to come." The memorandum also pointed to removal of raw sewage from the James as a "safeguard to the health of Lynchburg citizens."

Financing enlargement of the water filtration facilities and the construction of a sewage disposal plant will require issuance of \$5,000,000 in municipal bonds.

A Good Season for Bowhunters

Reports from many parts of the state indicate that this has been a successful season for Virginia bowhunters. In addition to the 21 deer killed on Hog Island during the special three-week season, bowhunters have checked in deer in many other sections of the state.



Dr. McKelden Smith, of Staunton, with deer taken by bow and arrow in Highland County.

Dr. McKelden Smith and Bill Bedall, both of Staunton and current president and secretary respectively of the Virginia Bowhunters Association, brought back deer from Highland County during the bow and arrow pre-season, November 1-10. Ambrose Kessler, Sam Rankin and Henry Keller, of Staunton, also bagged deer.

Preston B. Hundley was reported by the "Advance" as the first Lynchburger to bag a deer with bow and arrow. He took a spike buck on the Lynbuck Hunt Club's hunting re-

serve in Cumberland County. It was the first bow and arrow hunt for the club and took place during the November pre-season for archers.

Another first went to Emory Clifton, of Front Royal, who bagged a 120-pound doe on his first safari with a bow. He is believed to be the first archer since the Indians to bring down a deer in Warren County. Wallace Hart was the second.

Two Stanley bowhunters, Jesse Painter and Teddy McAllister, brought home venison from their hunt in the Fort Valley. A number of deer were checked in at Big Levels in the George Washington National Forest. Among the lucky Waynesboro hunters reported were "Woody" Woods, Kalman Toth, Jr., George G. Campbell, Jr., Randy Reed, Bill Stogdale and Frances Lilley.

Burns H. Robertson, of Middleburg, checked in a 137-pound buck at Keller's Store, Wheatfield. Two Christiansburg men who killed deer while bowhunting in Giles County were Bill Naddy and Joe Waddle, members of the Montgomery County Bow Club.

George Washington National Forest Contributes to County Funds

Forest Supervisor A. H. Anderson, of the George Washington National Forest, reports that \$41,858.07 has been deposited in the Virginia State Treasury to the credit of Alleghany, Amherst, Augusta, Bath, Frederick, Highland, Nelson, Page, Rockbridge, Rockingham, Shenandoah and Warren counties. Another \$4,932.21 has been deposited in the West Virginia State Treasury to the credit of Hampshire, Hardy and Pendleton counties in that state.

This money represents the counties' share of the receipts collected by the George Washington National

Forest for the products sold from, and the commercial uses made of National Forest Land. This amount is 25 percent of the total collections from the National Forest and is the annual payment made to counties in which the federal forest lands are located.

North American Wildlife Conference To Be Held In New Orleans

The 21st North American Wildlife Conference will convene in New Orleans on March 5 and will continue at the Jung Hotel for three days. The conference will be held under the sponsorship of the Wildlife Management Institute.

All phases of restoration and management of our renewable natural resources will be discussed by authorities in the various fields. Major conservation issues will be discussed in three general sessions and the important technical advances in the field of natural resources management will be covered in six technical sessions. The technical program will again this year be formulated by the Wildlife Society and its president, Justin W. Leonard, has appointed John S. Gottschalk, assistant chief of the Federal Aid Branch of the U. S. Fish and Wildlife Service, to represent the Society as chairman of the technical sessions program.

Leaflets to Tell Story of Wildlife Refuges

The Wichita Mountains Wildlife Refuge, the sanctuary now being threatened by proposed Army use, is one of the areas described in the new series of illustrated leaflets being issued by the Fish and Wildlife Service.

There are 264 refuges located in continental United States, Alaska, Hawaii, and Puerto Rico. Although each of these refuges marked with the National Wildlife Refuge emblem, the "sign of the flying goose," is primarily designed and operated as a sanctuary for wildlife, each is open in designated areas to the public. In nearly all the refuges, various recreational facilities are open to the public for much of the year.

The Department of the Interior has established eight new refuges since 1953 and is establishing three more at

the present time. Wildlife refuges have been set aside in Colorado and Kansas for the first time.

The leaflet stories of the wildlife refuges are available from the Superintendent of Documents, Government Printing Office, Washington, D. C., at five cents each except for the initial issue, "Visiting National Wildlife Refuges," which costs 10 cents.

Federal Aid Funds of Sixteen and a Half Million to States

Projects for the restoration and development of sport fishery and wildlife resources in the 48 states will benefit during the fiscal year 1956 from federal aid funds of \$16,537,900, Secretary of the Interior Douglas McKay has announced.

On the basis of one dollar from the state to match every three of federal funds, this will make \$22,050,533 available to the state departments for this work.

The combined federal aid in fish and wildlife restoration programs is administered by the Fish and Wildlife Service under the terms of the Pittman-Robertson Act for Wildlife and the Dingell-Johnson Act for sport fish. This year \$11,610,500 will be earmarked for wildlife restoration projects and \$4,927,400 for sport fishing activities.

Bass in America

A charming, leisurely and informative book has been added to the growing library of good literature on fishes with the publication of Erwin Bauer's new book, *Bass in America* (Simon and Schuster, New York, 1955).

The haunts, habits and other secrets of one of the world's finest freshwater game fish are told in delightful style by Mr. Bauer. The book is illustrated with photos by the author and David Goodnow.

Mr. Bauer is well known in the outdoor writing field and is editor of the fine magazine, *Ohio Conservation Bulletin*.

Rountree Assailant Sentenced To Eight Years In Penitentiary

A 12-man jury, which included two Negroes, deliberated less than an hour after hearing testimony before reach-

ing a verdict that Otis Silver, 43-year-old Nansemond County Negro, was guilty of the 1953 shooting of Game Warden W. Shelton Rountree. Silver was sentenced to eight years in the penitentiary but, with good behavior, he might go free in two years.

Silver has never admitted the shooting, but was convicted by a strong accumulation of circumstantial evidence. Particularly damaging to Silver's case was the report of a Federal Bureau of Investigation agent who ran ballistics tests on Silver's gun and shell cases found at the scene and testified that the cases found there had been fired in Silver's gun. Silver's 11-year-old daughter, Vivian, identified her father's gun, a single-barreled 16-gauge shotgun, testified that he was not at home on the day of the shooting and had instructed her and her brothers that if a policeman came to the house to find out if he had been hunting, to tell them "Naw."

Silver had been arrested last June on a charge of threatening to kill his wife. It was at that time Nansemond County Sheriff J. Frank Culpepper received information about the gun allegedly used to shoot Rountree. Jesse Eure, deputy sheriff was sent to Silver's house to get the gun and he and Rountree sent it on, along with shells picked up at the scene of the shooting in the F.B.I. ballistics laboratory in Washington for examination.

As first witness called to the stand, Rountree recalled the incidents leading up to the shooting but admitted he could not identify Silver as the man who shot him because he saw him in the dusk. He and Deputy Game Warden Sam Snead had gone on a routine patrol around the edge of the Dismal about sunset. While sitting in a jeep in a field just off the old Norfolk Road they heard a report from a shotgun and decided to investigate for possible illegal hunting.

"I heard this guy coming and stepped near a hickory tree," said Rountree. The man came up within 15 feet and mumbled something, then fired and the whole load hit Rountree's left arm which later had to be amputated.

Wildlife Questions and Answers

Ques.: Can otters swim under ice?

Ans.: Yes, indeed, they can. Otters have been known to swim at least a quarter of a mile under ice, from one breathing hole to another. An otter can dive, twist, turn and swim faster than any trout or salmon, according to "The Otter" by Roberts Mann and David H. Thompson.

Ques.: Is it true that a turtle can crawl out of its shell to escape from the heat of a fire?

Ans.: No, a turtle is attached inescapably to its shell. Unhappily this recurrent piece of animal lore has subjected turtles to some very unpleasant experiments. They deserve better treatment than this.

Ques.: Are there any poisonous animals?

Ans.: Poisonous animals are extremely rare, but they do exist. For example, the short-tailed shrew has a toxic bite. That curious animal, the platypus, is also venomous. A hollow spur on the inner side of a male platypus's hind leg connects with a poison gland.

Ques.: What is considered our rarest mammal? Our rarest bird?

Ans.: According to the "Remington News Letter," edited by Henry P. Davis, the black-footed ferret, now nearly extinct, is probably our rarest mammal. It has been almost exterminated because of ranchers poisoning the prairie dogs on which it preyed. The whooping crane, of which there are only 28 in existence, is our rarest bird.

Ques.: Can you tell me how the life span of the fox compares with that of the dog? With that of the wolf?

Ans.: In "This Fascinating Animal World," Alan Devoe, puts the dog's life at 15 years (the world's record is about 25) and the life span of the fox at 8-10. He warns, however, that these ages are based on the ages of captive and domesticated animals, the ages at which they attain sexual maturity, the ages at which they stop breeding and similar factors for calculation. The life span of the wolf is similarly estimated at 10-15.

Ques.: Does anyone know how many trips a bee has to make to gather the materials for a pound of honey?

Ans.: It has been estimated that every pound of honey represents about 80,000 field trips, according to naturalist Eugene Burns. A bee usually will not go more than half a mile from the hive, but occasionally ranges four or five miles.



"Pardon me, I thought you were a rug."

Ques.: Are there any coyotes in Virginia.

Ans.: Although coyotes have been killed in Rockingham, Highland, Grayson and Tazewell counties in recent years, they are not recognized, according to "Wild Mammals of Virginia" as an authentic Virginia species. Many coyotes are brought home from Western trips by tourists and are released or escape when they reach maturity. Others escape from carnivals and circuses. Most of the reported "wolves" and "coyotes" which harrass mountain sheep turn out to be wild dogs.

Ques.: Is the domestic turkey we have at Thanksgiving and Christmas the same breed of bird in domesticated form which the Pilgrims had for their early Thanksgivings at Plymouth?

Ans.: No, our domestic turkey is a Mexican relative of our native wild turkey, but not the same bird. Our domestic turkey is descended from the Mexican turkeys taken to Europe by the Spanish conquistadors in the 16th century. Eventually it was introduced to England where it became popular and was brought to America by English colonists.

Ques.: Are there any other animals beside 'possums which play dead to divert hunters and predators?

Ans.: Yes indeed there are. The fox, the dingo—the wild dog of Australia—snakes, toads, spiders, potato beetles and walking sticks, some birds, especially owls and buzzards are among the many other death-fakers.

Ques.: When I was at Hog Island last month I saw a large and beautifully colored snake which I had never seen before and I am wondering if you can help me identify it. It was a thick glossy snake without any neck constriction and had a sharp abrupt tail. Its general background color was bluish black, with three longitudinal red stripes and a yellow stripe on the sides. The underside was rose-colored with a double row of dark round spots and the scales were smooth.

Ans.: Although it is always risky to identify snakes without actually looking at them, the snake you describe is probably the rainbow snake (*Abaster erythrogrammus* Latreille) which is one of the rarest and most brilliantly colored of all North American snakes. Its range is from Maryland to Florida and Alabama, but it is seldom found except in swampy places and, because of its burrowing habit and limited distribution, it is seldom seen and very little is known of its habits. It has been reported occasionally from Hog Island State Waterfowl Refuge in the James River so that is probably the snake you were fortunate enough to see when you were there.

Ques.: Are all insects besides bees harmful to man?

Ans.: Insects are, by no means all harmful to man. Scientists have estimated that the damage done to our interests is accomplished by only about one percent of the insects in the world. Many insects in addition to bees carry on the valuable service to man of pollination. Dragonflies eat mosquitoes. The larvae of some flies destroy cutworms. The praying mantis is an insect-destroyer. These indicate only a few of the useful functions of insects.

Ques.: What is the smallest fish in the world?

Ans.: The smallest known fish in the world is the Pandaka pygmaea. It is about the size of an ant and is nearly transparent. Its large eyes are the only feature that is clearly visible.



Piedmont Photo Crafts

LIVING CONSERVATION MEMORIAL

MEMORIALS DEDICATED TO PERSONS, EVENTS OR IDEALS TAKE MANY FORMS. THEY CAN BE BUILDINGS, TOMBSTONES, STATUES, AND OTHER NON-LIVING OBJECTS. THEY, TOO, CAN BE LIVING THINGS SUCH AS TREES, FORESTS, PRESERVES, PARKS.

IN LYNCHBURG, VIRGINIA, A GROUP OF SELFLESS, HARD-WORKING, DEVOTED SPORTSMEN-CONSERVATIONISTS HAVE ELECTED TO TURN A RUN-DOWN 165 ACRE TRACT OF LAND INTO A MODEL CONSERVATION PARK.

WHEN THE LYNCHBURG CHAPTER OF THE IZAAK WALTON LEAGUE SET OUT TO ESTABLISH THEIR LIVING CONSERVATION MEMORIAL—A PROJECT SYMBOLIZING THE BEST IN WALTONIANISM AND CONSERVATION—MANY SKEPTICS RAISED A SCORNFUL EYEBROW. BUT WHERE THERE WAS WILL THERE WAS A WAY AND WALTON PARK WAS BORN.

NO LONGER IN SWADDLING APPAREL, THE PARK IS A BEAUTIFULLY DEVELOPED CONSERVATION PARK FOR ALL LYNCHBURG WALTONIANS, THEIR FAMILIES AND FRIENDS TO ENJOY. THERE'S A 5 ACRE LAKE WITH FISHING, A WHITE SANDY BEACH FOR SWIMMING, PICNIC TABLES, FIREPLACES, A CONCESSION BUILDING, HUGE BARBECUE PIT, AND FACILITIES FOR TRAP, SKEET, RIFLE, AND ARCHERY PRACTICE, PARKING, PLUS MILES OF IMPROVED NATURE TRAILS AND ACRES OF IMPROVED HABITAT FOR WILDLIFE. THERE ARE FOREST PLANTINGS AND GAME COVERTS, JUST ABOUT ALL THAT SYMBOLIZES CONSERVATION AT ITS BEST.

EDUCATIONAL, RECREATIONAL, INSPIRATIONAL WALTON PARK STANDS AS A LIVING MEMORIAL TO CONSERVATION AND A MODEL TO OTHER COMMUNITIES AND ORGANIZATIONS ON WHAT CAN BE DONE WHEN THERE'S RESOLUTION TO DO SOMETHING GOOD.

Last Notice!

Has Your School Entered?

Closing Date Feb. 28, 1956

**9th
ANNUAL
WILDLIFE
Essay Contest**

*Sponsored by the Virginia Commission of Game and Inland Fisheries
and the Virginia Division of the Izaak Walton League of America*

ONE, H. S. SENIOR GRADE, \$400 COLLEGE CONSERVATION SCHOLARSHIP

SUBJECT: What I can do to help wildlife in Virginia.

APPROVED BY: Virginia State Board of Education.

PRIZES

One 12th grade, college scholarship.....	\$ 400
Eight grand prize awards, \$50 each, one for each grade, totaling.....	\$ 400
Eight second prizes, \$25 each, one for each grade, totaling.....	\$ 200
Eight third prizes, \$15 each, one for each grade, totaling.....	\$ 120
Sixteen honorable mention prizes, \$10 each, two for each grade, totaling.....	\$ 160
Sixteen special mention prizes, \$5 each, two for each grade, totaling.....	\$ 80
One school prize.....	\$ 40
Grand total	\$1,400

There will be seven prizes in each of the eight competing grades. Scholarship winner, grand prize winners and winning school representatives will come to Rich-

mond as guests of the sponsors to receive their awards. Others will be given awards in the schools.

Two hundred certificates of merit also will be awarded in addition to the money grand prizes.

ENDORSED BY: Virginia Resource Use Education Council and Conservation Committee, Virginia Academy of Science.

HOW TO ENROLL

Students from all Virginia Schools, grades 5-12 inclusive, are eligible to participate but essays must be submitted through the schools participating. Schools to be eligible must send in an official entry card provided for the purpose.

Information on the contest may be obtained by contacting the Richmond office of the Game Commission.

All essays **MUST** be mailed first class prepaid, to the Commission of Game and Inland Fisheries, Box 1642, Richmond 13, Virginia. Essays must be mailed and postmarked not later than February 29, 1956.